GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA

UNSTARRED QUESTION NO:221
ANSWERED ON:09.07.2014
EFFICIENCY IN WEATHER FORECASTS
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Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether the National Disaster Management Authority (NDMA) has directed the Indian Meteorological Department (IMD) to draw up a time bound plan to increase the efficiency of the weather forecast;

(b) if so, the details thereof and the present system/technology being used to forecast weather in the country;

(c) whether the Government proposes to put in place a world class system, on the lines of world class Tsunami warning system, to provide more specific location and time-wise forecasts; and

(d) if so, the details thereof and the steps taken by the Government in this regard?

Answer

MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES (DR. JITENDRA SINGH)

(a) No Madam. Earth System Science Organization-(ESSO-IMD) has formulated plan of Himalayan Meteorology Program to augment observing systems by deploying Doppler Weather Radars, rain radars, Automatic Weather Stations (AWSs), Automatic Rain Gauges (ARGs) etc. This plan has been shared with NDMA. The above observations will lead to improved understanding of the Himalayan weather in general and severe weather in particular. The assimilation of the above observational data will facilitate improvement in now-casting and forecasting.

(b) The weather forecasts are given at three levels, national level from Delhi, North-West Region from Delhi and Local level, in this case from Dehradun. The National Weather Bulletin, based on the global model forecasts produced at 22Km grid scale, is issued four times a day, morning, mid-day, evening and night. It gives weather forecast for next three days, and outlook for subsequent four days. Apart from this, for severe weather, forecast is also provided under heading `Weather Warning for next Three Days.` Regional Weather Forecast Centre provide forecast (based on WRF model, 9 km, ensemble prediction system and unified model) for the NW region for next 48 hours as well as outlook for next 48 hours as an input for forecasting by state level meteorological centers in the region. The local level forecasts are provided twice a day based on above mentioned model forecasts as well as evolving synoptic situation (pressure, winds, rainfall from network of AWSs and ARGs, satellite and radar data). Twice weekly district level Agro-Meteorological Advisory Service (AAS) bulletins for next 120h are issued for use by the farming community.

The national level forecasts are provided to NDMA control room, NDRF as well as print and electronic media and is available on IMD website. The local forecasts are provided to all state and district level functionaries. A short-term forecast of low level winds (300-2100m) is also being provided for helicopter operations.

(c) Based on scientific assessment of the need for further augmentation of observing system network expansion has been formulated. The upgradation of the observing system, high performance computing, communication, forecast/warning systems, product dissemination systems etc. are part of a continuous process by which state-of-the-art science and technology tools can be made accessible to the scientists engaged in weather research and forecasting towards enhancing the service quality.

(d) Does not arise.